



Sea ice thickness measurements collected during the LOMROG 2007 and 2009 expeditions

Skourup, Henriette; Forsberg, René; Hanson, Susanne; Pedersen, Rasmus; Toudal Pedersen, Leif

Publication date:
2010

Document Version
Publisher's PDF, also known as Version of record

[Link back to DTU Orbit](#)

Citation (APA):
Skourup, H., Forsberg, R., Hanson, S., Pedersen, R., & Toudal Pedersen, L. (2010). *Sea ice thickness measurements collected during the LOMROG 2007 and 2009 expeditions*. Abstract from LOMROG I and II workshop, Stockholm, Sweden.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Sea ice thickness measurements collected during the LOMROG 2007 and 2009 expeditions

H. Skourup, R. Forsberg, S. Hanson, R. Pedersen, L. Toudal

According to scientific measurements, the Arctic sea ice extent has declined dramatically over the past thirty years, with the most extreme decline seen in the summer melt season. Other observations indicate that the sea ice has become thinner and perennial ice less widely distributed. The processes involved in the declining sea ice are not fully understood. This is primarily due to a lack of knowledge of the variety and high spatial resolution of, e.g. snow depth, ice thickness and morphology, which are difficult or impossible to obtain remotely.

During the LOMROG expeditions in 2007 and 2009 we have collected a unique data set of late summer sea ice thickness, freeboard height and snow depth from the high Arctic Ocean during the time of the annual minimum sea ice extent. The data were collected by on-the-ground drilling and EM measurements. Here we give a brief overview of the data collection, as well as the results including the freeboard-to-sea-ice thickness conversion factor, which is used when interpreting freeboard heights measured by remote sensing.